C. Kaufman

Re-run

#72

ENTERED
p.6

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/601,582A

DATE: 10/03/2002
TIME: 15:12:21

Input Set : A:\20052YP.txt
Output Set: N:\CRF4\10032002\I601582A.raw

```
 4 <110> APPLICANT: Liu, Qingyun
 5        McDonald, Terrence
 6        Bonnert, Timothy P.
 7        Ng, Gordon
 8        Kolakowski, Lee F., Jr.
 9        Clark, Janet
10        Bonner, Tom I.
12 <120> TITLE OF INVENTION: NOVEL GABAB RECEPTOR DNA SEQUENCES
15 <130> FILE REFERENCE: 20052YP
17 <140> CURRENT APPLICATION NUMBER: 09/601,582A
18 <141> CURRENT FILING DATE: 2000-12-04
20 <150> PRIOR APPLICATION NUMBER: PCT/US99/02361
21 <151> PRIOR FILING DATE: 1999-02-03
23 <150> PRIOR APPLICATION NUMBER: 60/073,767
24 <151> PRIOR FILING DATE: 1998-02-05
26 <160> NUMBER OF SEQ ID NOS: 46
28 <170> SOFTWARE: FastSEQ for Windows Version 4.0
30 <210> SEQ ID NO: 1
31 <211> LENGTH: 3480
32 <212> TYPE: DNA
33 <213> ORGANISM: Homo Sapiens
35 <400> SEQUENCE: 1
36 ccgccctccc ccggccgagc tccagggctg ccgcctagca gctcccggcg ggagagcggt        60
37 tcagagctcg ctcccacccc ttcccggcgt gattgatccg tcacgggcgc ctccgctgcc       120
38 gccgccgccg ccgcggccgt tctgagccga gccggaaccc tagcccgaga cggagccggg       180
39 gcccgggccg gcgccattgc gcgggcgccg cgggaagacc ttggcgcggg gcggcgggcc       240
40 gggccaggcc atgcgggccg agtgagccgg cgcccgcagc ccgcggcgcg gcatggcttc       300
41 cccgcggagc tccgggcagc ccgggccgcc gccgccgccg ccaccgccgc ccgcgcgcct       360
42 gctactgcta ctgctgctgc cgctgctgct gcctctggcg cccggggcct ggggctgggc       420
43 gcggggcgcc ccccggccgc cgcccagcag cccgccgctc tccatcatgg gcctcatgcc       480
44 gctcaccaag gaggtggcca agggcagcat cgggcgcggt gtgctccccg ccgtggaact       540
45 ggccatcgag cagatccgca acgagtcact cctgcgcccc tacttcctcg acctgcggct       600
46 ctatgacacg gagtgcgaca acgcaaaagg gttgaaagcc ttctacgatg caataaaata       660
47 cgggccgaac cacttgatgg tgtttggagg cgtctgtcca tccgtcacat ccatcattgc       720
48 agagtccctc caaggctgga atctggtgca gctttctttt gctgcaacca cgcctgttct       780
49 agccgataag aaaaaatacc cttatttctt tcggaccgtc ccatcagaca atgcggtgaa       840
50 tccagccatt ctgaagttgc tcaagcacta ccagtggaag cgcgtgggca cgctgacgca       900
51 agacgttcag aggttctctg aggtgcggaa tgacctgact ggagttctgt atggcgagga       960
52 cattgagatt tcagacaccg agagcttctc caacgatccc tgtaccagtg tcaaaaagct      1020
53 gaaggggaat gatgtgcgga tcatccttgg ccagtttgac cagaatatgg cagcaaaagt      1080
54 gttctgttgt gcatacgagg agaacatgta tggtagtaaa tatcagtgga tcattccggg      1140
55 ctggtacgag ccttcttggt gggagcaggt gcacacggaa gccaactcat cccgctgcct      1200
56 ccggaagaat ctgcttgctg ccatggaggg ctacattggc gtggatttcg agcccctgag      1260
```

RAW SEQUENCE LISTING   DATE: 10/03/2002
PATENT APPLICATION: US/09/601,582A   TIME: 15:12:21

Input Set : A:\20052YP.txt
Output Set: N:\CRF4\10032002\I601582A.raw

```
57 ctccaagcag atcaagacca tctcaggaaa gactccacag cagtatgaga gagagtacaa  1320
58 caacaagcgg tcaggcgtgg ggcccagcaa gttccacggg tacgcctacg atggcatctg  1380
59 ggtcatcgcc aagacactgc agagggccat ggagacactg catgccagca gccggcacca  1440
60 gcggatccag gacttcaact acacggacca cacgctgggc aggatcatcc tcaatgccat  1500
61 gaacgagacc aacttcttcg gggtcacggg tcaagttgta ttccggaatg gggagagaat  1560
62 ggggaccatt aaatttactc aatttcaaga cagcagggag gtgaaggtgg gagagtacaa  1620
63 cgctgtggcc gacacactgg agatcatcaa tgacaccatc aggttccaag gatccgaacc  1680
64 accaaaagac aagaccatca tcctggagca gctgcggaag atctccctac ctctctacag  1740
65 catcctctct gccctcacca tcctcgggat gatcatggcc agtgcttttc tcttcttcaa  1800
66 catcaagaac cggaatcaga agctcataaa gatgtcgagt ccatacatga acaaccttat  1860
67 catccttgga gggatgctct cctatgcttc catatttctc tttggccttg atggatcctt  1920
68 tgtctctgaa aagacctttg aaacactttg caccgtcagg acctggattc tcaccgtggg  1980
69 ctacacgacc gcttttgggg ccatgtttgc aaagacctgg agagtccacg ccatcttcaa  2040
70 aaatgtgaaa atgaagaaga agatcatcaa ggaccagaaa ctgcttgtga tcgtgggggg  2100
71 catgctgctg atcgacctgt gtatcctgat ctgctggcag gctgtggacc ccctgcgaag  2160
72 gacagtggag aagtacagca tggagccgga cccagcagga cgggatatct ccatccgccc  2220
73 tctcctggag cactgtgaga acacccatat gaccatctgg cttggcatcg tctatgccta  2280
74 caagggactt ctcatgttgt tcggttgttt cttagcttgg gagacccgca acgtcagcat  2340
75 ccccgcactc aacgacagca agtacatcgg gatgagtgtc tacaacgtgg ggatcatgtg  2400
76 catcatcggg gccgctgtct ccttcctgac ccgggaccag cccaatgtgc agttctgcat  2460
77 cgtggctctg gtcatcatct tctgcagcac catcaccctc tgcctggtat tcgtgccgaa  2520
78 gctcatcacc ctgagaacaa acccagatgc agcaacgcag aacaggcgat tccagttcac  2580
79 tcagaatcag aagaaagaag attctaaaac gtccacctcg gtcaccagtg tgaaccaagc  2640
80 cagcacatcc cgcctggagg gcctacagtc agaaaaccat cgcctgcgaa tgaagatcac  2700
81 agagctggat aaagacttgg aagaggtcac catgcagctg caggacacac cagaaaagac  2760
82 cacctacatt aaacagaacc actaccaaga gctcaatgac atcctcaacc tgggaaactt  2820
83 cactgagagc acagatggag gaaaggccat tttaaaaaat cacctcgatc aaaatcccca  2880
84 gctacagtgg aacacaacag agccctctcg aacatgcaaa gatcctatag aagatataaa  2940
85 ctctccagaa cacatccagc gtcggctgtc cctccagctc cccatcctcc accacgccta  3000
86 cctcccatcc atcggaggcg tggacgccag ctgtgtcagc ccctgcgtca gccccaccgc  3060
87 cagcccccgc cacagacatg tgccaccctc cttccgagtc atggtctcgg gcctgtaagg  3120
88 gtgggggggcc tgggcccggg gcctcccccg tgacagaacc acactgggca gaggggtctg  3180
89 ctgcagaaac actgtcggct ctggctgcgg agaagctggg caccatggct ggcctctcag  3240
90 gaccactcgg atggcactca ggtggacagg acggggcagg gggagacttg gcacctgacc  3300
91 tcgagcctta tttgtgaagt ccttatttct tcacaaagaa gaggaacgga aatgggacgt  3360
92 cttccttaac atctgcaaac aaggaggcgc tgggatatcr aattccacca cactggcggc  3420
93 ccgcgcttgs tcstaatcat ggtcataact gtttcctgtg ttgaaattgt tatccgctcc  3480
95 <210> SEQ ID NO: 2
96 <211> LENGTH: 941
97 <212> TYPE: PRT
98 <213> ORGANISM: Homo Sapiens
100 <400> SEQUENCE: 2
101 Met Ala Ser Pro Arg Ser Ser Gly Gln Pro Gly Pro Pro Pro Pro
102  1               5                  10                 15
103 Pro Pro Pro Pro Ala Arg Leu Leu Leu Leu Leu Leu Pro Leu Leu
104              20                 25                 30
105 Leu Pro Leu Ala Pro Gly Ala Trp Gly Trp Ala Arg Gly Ala Pro Arg
106          35                 40                 45
107 Pro Pro Pro Ser Ser Pro Pro Leu Ser Ile Met Gly Leu Met Pro Leu
```

RAW SEQUENCE LISTING   DATE: 10/03/2002
PATENT APPLICATION: US/09/601,582A   TIME: 15:12:21

Input Set : A:\20052YP.txt
Output Set: N:\CRF4\10032002\I601582A.raw

```
108     50                    55                  60
109 Thr Lys Glu Val Ala Lys Gly Ser Ile Gly Arg Gly Val Leu Pro Ala
110 65                   70                  75                  80
111 Val Glu Leu Ala Ile Glu Gln Ile Arg Asn Glu Ser Leu Leu Arg Pro
112                  85                  90                  95
113 Tyr Phe Leu Asp Leu Arg Leu Tyr Asp Thr Glu Cys Asp Asn Ala Lys
114                 100                 105                 110
115 Gly Leu Lys Ala Phe Tyr Asp Ala Ile Lys Tyr Gly Pro Asn His Leu
116         115                 120                 125
117 Met Val Phe Gly Gly Val Cys Pro Ser Val Thr Ser Ile Ile Ala Glu
118         130                 135                 140
119 Ser Leu Gln Gly Trp Asn Leu Val Gln Leu Ser Phe Ala Ala Thr Thr
120 145                 150                 155                 160
121 Pro Val Leu Ala Asp Lys Lys Lys Tyr Pro Tyr Phe Phe Arg Thr Val
122                 165                 170                 175
123 Pro Ser Asp Asn Ala Val Asn Pro Ala Ile Leu Lys Leu Leu Lys His
124                 180                 185                 190
125 Tyr Gln Trp Lys Arg Val Gly Thr Leu Thr Gln Asp Val Gln Arg Phe
126         195                 200                 205
127 Ser Glu Val Arg Asn Asp Leu Thr Gly Val Leu Tyr Gly Glu Asp Ile
128         210                 215                 220
129 Glu Ile Ser Asp Thr Glu Ser Phe Ser Asn Asp Pro Cys Thr Ser Val
130 225                 230                 235                 240
131 Lys Lys Leu Lys Gly Asn Asp Val Arg Ile Ile Leu Gly Gln Phe Asp
132                 245                 250                 255
133 Gln Asn Met Ala Ala Lys Val Phe Cys Cys Ala Tyr Glu Glu Asn Met
134                 260                 265                 270
135 Tyr Gly Ser Lys Tyr Gln Trp Ile Ile Pro Gly Trp Tyr Glu Pro Ser
136         275                 280                 285
137 Trp Trp Glu Gln Val His Thr Glu Ala Asn Ser Ser Arg Cys Leu Arg
138         290                 295                 300
139 Lys Asn Leu Leu Ala Ala Met Glu Gly Tyr Ile Gly Val Asp Phe Glu
140 305                 310                 315                 320
141 Pro Leu Ser Ser Lys Gln Ile Lys Thr Ile Ser Gly Lys Thr Pro Gln
142                 325                 330                 335
143 Gln Tyr Glu Arg Glu Tyr Asn Asn Lys Arg Ser Gly Val Gly Pro Ser
144                 340                 345                 350
145 Lys Phe His Gly Tyr Ala Tyr Asp Gly Ile Trp Val Ile Ala Lys Thr
146         355                 360                 365
147 Leu Gln Arg Ala Met Glu Thr Leu His Ala Ser Ser Arg His Gln Arg
148         370                 375                 380
149 Ile Gln Asp Phe Asn Tyr Thr Asp His Thr Leu Gly Arg Ile Ile Leu
150 385                 390                 395                 400
151 Asn Ala Met Asn Glu Thr Asn Phe Phe Gly Val Thr Gly Gln Val Val
152                 405                 410                 415
153 Phe Arg Asn Gly Glu Arg Met Gly Thr Ile Lys Phe Thr Gln Phe Gln
154         420                 425                 430
155 Asp Ser Arg Glu Val Lys Val Gly Glu Tyr Asn Ala Val Ala Asp Thr
156         435                 440                 445
```

RAW SEQUENCE LISTING   DATE: 10/03/2002
PATENT APPLICATION: US/09/601,582A   TIME: 15:12:21

Input Set : **A:\20052YP.txt**
Output Set: **N:\CRF4\10032002\I601582A.raw**

```
157 Leu Glu Ile Ile Asn Asp Thr Ile Arg Phe Gln Gly Ser Glu Pro Pro
158     450                 455                 460
159 Lys Asp Lys Thr Ile Ile Leu Glu Gln Leu Arg Lys Ile Ser Leu Pro
160 465                 470                 475                 480
161 Leu Tyr Ser Ile Leu Ser Ala Leu Thr Ile Leu Gly Met Ile Met Ala
162             485                 490                 495
163 Ser Ala Phe Leu Phe Phe Asn Ile Lys Asn Arg Asn Gln Lys Leu Ile
164             500                 505                 510
165 Lys Met Ser Ser Pro Tyr Met Asn Asn Leu Ile Ile Leu Gly Gly Met
166         515                 520                 525
167 Leu Ser Tyr Ala Ser Ile Phe Leu Phe Gly Leu Asp Gly Ser Phe Val
168         530                 535                 540
169 Ser Glu Lys Thr Phe Glu Thr Leu Cys Thr Val Arg Thr Trp Ile Leu
170 545                 550                 555                 560
171 Thr Val Gly Tyr Thr Thr Ala Phe Gly Ala Met Phe Ala Lys Thr Trp
172             565                 570                 575
173 Arg Val His Ala Ile Phe Lys Asn Val Lys Met Lys Lys Lys Ile Ile
174             580                 585                 590
175 Lys Asp Gln Lys Leu Leu Val Ile Val Gly Gly Met Leu Leu Ile Asp
176         595                 600                 605
177 Leu Cys Ile Leu Ile Cys Trp Gln Ala Val Asp Pro Leu Arg Arg Thr
178     610                 615                 620
179 Val Glu Lys Tyr Ser Met Glu Pro Asp Pro Ala Gly Arg Asp Ile Ser
180 625                 630                 635                 640
181 Ile Arg Pro Leu Leu Glu His Cys Glu Asn Thr His Met Thr Ile Trp
182             645                 650                 655
183 Leu Gly Ile Val Tyr Ala Tyr Lys Gly Leu Leu Met Leu Phe Gly Cys
184             660                 665                 670
185 Phe Leu Ala Trp Glu Thr Arg Asn Val Ser Ile Pro Ala Leu Asn Asp
186         675                 680                 685
187 Ser Lys Tyr Ile Gly Met Ser Val Tyr Asn Val Gly Ile Met Cys Ile
188         690                 695                 700
189 Ile Gly Ala Ala Val Ser Phe Leu Thr Arg Asp Gln Pro Asn Val Gln
190 705                 710                 715                 720
191 Phe Cys Ile Val Ala Leu Val Ile Ile Phe Cys Ser Thr Ile Thr Leu
192             725                 730                 735
193 Cys Leu Val Phe Val Pro Lys Leu Ile Thr Leu Arg Thr Asn Pro Asp
194             740                 745                 750
195 Ala Ala Thr Gln Asn Arg Arg Phe Gln Phe Thr Gln Asn Gln Lys Lys
196         755                 760                 765
197 Glu Asp Ser Lys Thr Ser Thr Ser Val Thr Ser Val Asn Gln Ala Ser
198     770                 775                 780
199 Thr Ser Arg Leu Glu Gly Leu Gln Ser Glu Asn His Arg Leu Arg Met
200 785                 790                 795                 800
201 Lys Ile Thr Glu Leu Asp Lys Asp Leu Glu Glu Val Thr Met Gln Leu
202             805                 810                 815
203 Gln Asp Thr Pro Glu Lys Thr Thr Tyr Ile Lys Gln Asn His Tyr Gln
204             820                 825                 830
205 Glu Leu Asn Asp Ile Leu Asn Leu Gly Asn Phe Thr Glu Ser Thr Asp
```

```
206         835                   840                845
207 Gly Gly Lys Ala Ile Leu Lys Asn His Leu Asp Gln Asn Pro Gln Leu
208     850                   855                860
209 Gln Trp Asn Thr Thr Glu Pro Ser Arg Thr Cys Lys Asp Pro Ile Glu
210 865                   870                875                880
211 Asp Ile Asn Ser Pro Glu His Ile Gln Arg Arg Leu Ser Leu Gln Leu
212                   885                890                895
213 Pro Ile Leu His His Ala Tyr Leu Pro Ser Ile Gly Gly Val Asp Ala
214             900                   905                910
215 Ser Cys Val Ser Pro Cys Val Ser Pro Thr Ala Ser Pro Arg His Arg
216         915                   920                925
217 His Val Pro Pro Ser Phe Arg Val Met Val Ser Gly Leu
218     930                   935                940
220 <210> SEQ ID NO: 3
221 <211> LENGTH: 18
222 <212> TYPE: DNA
223 <213> ORGANISM: Homo Sapiens
225 <400> SEQUENCE: 3
226 ccgttctgag ccgagccg                                              18
228 <210> SEQ ID NO: 4
229 <211> LENGTH: 20
230 <212> TYPE: DNA
231 <213> ORGANISM: Homo Sapiens
233 <400> SEQUENCE: 4
234 tccgcagcca gagccgacag                                            20
236 <210> SEQ ID NO: 5
237 <211> LENGTH: 20
238 <212> TYPE: DNA
239 <213> ORGANISM: Homo Sapiens
241 <400> SEQUENCE: 5
242 gggatgatca tggccagtgc                                            20
244 <210> SEQ ID NO: 6
245 <211> LENGTH: 20
246 <212> TYPE: DNA
247 <213> ORGANISM: Homo Sapiens
249 <400> SEQUENCE: 6
250 ggatccatca aggccaaaga                                            20
252 <210> SEQ ID NO: 7
253 <211> LENGTH: 19
254 <212> TYPE: DNA
255 <213> ORGANISM: Homo Sapiens
257 <400> SEQUENCE: 7
258 gccgctgtct ccttcctga                                             19
260 <210> SEQ ID NO: 8
261 <211> LENGTH: 21
262 <212> TYPE: DNA
263 <213> ORGANISM: Homo Sapiens
265 <400> SEQUENCE: 8
266 ttggttcaca ctggtgaccg a                                          21
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/03/2002
PATENT APPLICATION: US/09/601,582A   TIME: 15:12:22

Input Set : **A:\20052YP.txt**
Output Set: **N:\CRF4\10032002\I601582A.raw**

<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:23; N Pos. 1992